Curriculum Vitae: Brian A. Barsky

CONTACT:

Telephone Numbers:	Office (510) 642-9838 CS Division (510) 642-1042
Fax Numbers:	CS Division (510) 642-5775 Campus Telecommunications (510) 643-8245
E-mail:	barsky@berkeley.edu
World Wide Web:	http://people.cs.berkeley.edu/~barsky/

RESEARCH INTERESTS:

Interactive and realistic three-dimensional computer graphics, image synthesis, computational photography, computational aesthetics, display technology, computer methods for optometry and ophthalmology, computer aided cornea modeling and visualization, corneal topographic mapping, videokeratography techniques, medical imaging, methods for the design and fabrication of contact lenses, computer aided geometric design and modeling, CAD/CAM/CIM, spline curve/surface representations, visualization in scientific computing, and virtual environments for surgical simulation.

EDUCATION:

9/78-6/81	Ph.D. in Computer Science University of Utah, Salt Lake City, Utah 84112, U.S.A.
9/76-9/78	M.S. in Architectural Science/Computer Graphics and Computer Science Cornell University, Ithaca, New York 14853, U.S.A.
9/73-5/76	B.Sc. with Great Distinction in Mathematics and Computer Science McGill University, Montréal, Québec, Canada H3C 3G1
9/71-5/73	D.C.S. in Engineering McGill University, Montréal, Québec, Canada H3C 3G1

EXTERNAL EXAMINING BOARDS AND COLLABORATIVE PARTNERSHIPS:

External Examiner, Multimedia University, Cyberjaya and Melaka, Malaysia
External Academic Advisor, City University of Hong Kong
International Collaborative Partner, Universiti Tunku Abdul Rahman (UTAR), Malaysia

PROFESSIONAL EXPERIENCE:

1/18-present	Professor of the Graduate School University of California, Berkeley, California 94720, U.S.A
7/17-present	Professor Emeritus of Computer Science Department of Electrical Engineering and Computer Sciences University of California, Berkeley, California 94720-1776, U.S.A.
7/17-present	Affiliate Professor Emeritus of Optometry University of California, Berkeley, California 94720-2020, U.S.A
1/16 and 1/17	Visiting Professor Ashoka University Sonipat, Haryana, India
3/14-4/14	Visiting Professor Yale-NUS College Singapore
12/13-1/14 and 5/14-6/14	Visiting Professor Department of Computer Graphics and Multimedia Faculty of Information Technology Brno University of Technology, Czech Republic
9/13-12/13	Visiting Professor Machine Vision and Pattern Recognition Laboratory Lappeenranta University of Technology, Finland
9/05-8/06	Directeur de Recherche CNRS Laboratoire d'Informatique Fondamentale de Lille (LIFL) l'Université des Sciences et Technologies de Lille (USTL), France
7/91-present	Professor of Computer Science Department of Electrical Engineering and Computer Sciences University of California, Berkeley, California 94720-1776, U.S.A.
7/95-present	Affiliate Professor of Optometry University of California, Berkeley, California 94720-2020, U.S.A.
4/94-present	Member of Vision Science Group University of California, Berkeley, California 94720-2020, U.S.A.
1/94-present	Member of Bioengineering Group

	University of California, Berkeley and San Francisco
12/99-1/00	Distinguished Visiting Professor of Computer Science School of Computing National University of Singapore
9/98-8/99	Visiting Professor of Computer Science Department of Computer Science Hong Kong University of Science and Technology, Hong Kong
6/96-7/96 and 6/97-7/97 and 7/98	Visiting Professor of Computer Science Modélisation Géométrique et Infographie Interactive group l'Institut de Recherche en Informatique de Nantes, France and l'Ecole Centrale de Nantes, France
2/98-3/98	Visiting Professor of Computer Science Department of Computer Science University of Otago, Dunedin, New Zealand
9/91-7/92	Visiting Professor of Computer Science Department of Computer Science University of Toronto, Toronto, Ontario, Canada M5S 1A4
7/86-7/91	Associate Professor of Computer Science Department of Electrical Engineering and Computer Sciences University of California, Berkeley, California 94720-1776, U.S.A.
8/86-8/91	Adjunct Associate Professor of Computer Science Department of Computer Science University of Waterloo, Waterloo, Ontario, Canada N2L 3G1
7/81-7/86	Assistant Professor of Computer Science Department of Electrical Engineering and Computer Sciences University of California, Berkeley, California 94720-1776, U.S.A.
8/82-8/86	Adjunct Assistant Professor of Computer Science Department of Computer Science University of Waterloo, Waterloo, Ontario, Canada N2L 3G1
9/91-7/92	Visiting Professor of Computer Science Department of Computer Science University of Toronto, Toronto, Ontario, Canada M5S 1A4
10/85-9/86	Attaché de recherche invité at Laboratoire Image

	l'Ecole Nationale Supérieure des Télécommunications, Paris, France
3/79-8/79	Visiting Researcher in Computer Aided Design/Manufacturing Sentralinstitutt for Industriell Forskning, Oslo 3, Norway
9/78-3/79	Teaching Assistant University of Utah, Salt Lake City, Utah 84112, U.S.A.
9/77-12/77	Teaching Assistant Cornell University, Ithaca, New York, 14853, U.S.A.
9/76-8/77	Research Assistant in Computer Graphics Cornell University, Ithaca, New York, 14853, U.S.A.
5/75-8/75	Systems Analyst/Computer Programmer Operations Research and Systems Planning Canadian Pacific Research, Montreal, Quebec, Canada
1/75-5/75	Statistical Analyst/Computer Programmer McGill University, Montreal, Quebec, Canada, H3C 3G1
9/74-5/76	Mathematics Tutor McGill Tutoring Service, Montreal, Quebec, Canada, H3C 3G1

ACADEMIC AWARDS:

ACM Distinguished Speaker (Jan. 2015 – Feb. 28, 2021)
Warren and Marjorie Minner Faculty Fellow in Engineering Ethics and Professional/Social Responsibility (2013)
UC Berkeley Presidential Chair Fellow (2008-09 and 2012-2013)
Fellow of the American Academy of Optometry (1997)
William Evans Fellowship (New Zealand) (1998)
Fulbright Scholarship (1985)
National Science Foundation Presidential Young Investigator Award (1985)
IBM Faculty Development Award (1983)
Regents' Junior Faculty Fellowship
NSERC Postgraduate Scholarship
University of Utah Graduate Research Fellowship
Josephine Beam Scholarship
NRC Postgraduate Scholarship
Bourse de l'Enseignement Supérieur
Canadian Mathematical Congress Bursary
J.W. McConnell Scholarship
McGill University Scholarship
Steinberg Bursary

RESEARCH GRANTS:

Co-Principal Investigator for CITRIS grant “Bedside to the Cloud and Back: Real-Time Data Analytics From Critical Care Instrumentation”

Principal Investigator for National Science Foundation research grant “Individualized Inverse-Blurring and Aberration Compensated Displays for Personalized Vision Correction with Applications for Mobile Devices”

Principal Investigator for National Science Foundation research grant “Aesthetically Empowering Novice Photographers”

Principal Investigator for National Science Foundation research grant “Computational Photography: Lighting and Focus”

Principal Investigator for National Science Foundation research grant “Combined Micro- and Macro-Model for Simulating Cloth by Deriving Mechanical Behavior from Underlying Fabric Structure”

Principal Investigator for National Science Foundation research grant “Vision-Realistic Rendering”

Principal Investigator for Microelectronics Innovation and Computer Research Opportunities (MICRO) research grant "Interactive Scientific Visualization of the Eye"

Principal Investigator for National Science Foundation research grant "Visualization and Simulation in Scientific Computing for the Cornea"

Co-Principal Investigator for National Science Foundation research grant "Virtual Environments for Telesurgery and Surgical Training: Efficient Computation, Visualization, and Interaction"

Principal Investigator for National Science Foundation research grant "Developing New Geometric Modeling and Scientific Visualization Techniques for Curved Optical Surfaces"

Principal Investigator for the National Keratoconus Foundation grant "Computer Aided Geometric Modeling of the Keratoconic Cornea"

Principal Investigator for Microelectronics Innovation and Computer Research Opportunities (MICRO) research grant "Televisualization of Corneal Shape"

Co-Principal Investigator for France-Berkeley Fund grant "Geometric Modeling of the Cornea Using Videokeratography"/"Modélisation géométrique de la cornée par vidéokératographie"

Principal Investigator for Hewlett-Packard grant "3D Modeling for Computer Graphics"

Principal Investigator for National Science Foundation research grant "Realistic Yet Efficient Image Synthesis"

Principal Investigator for Microelectronics Innovation and Computer Research Opportunities (MICRO) research grant "Efficient Algorithms for Global Illumination"

Principal Investigator for Digital Equipment Corporation grant "Integral and Rational Beta-spline Curves and Surfaces for Computer Graphics and Geometric Modeling"

Principal Investigator for National Science Foundation Presidential Young Investigator Award "2-D and 3-D Interactive Computer Modelling Systems"

Principal Investigator for Control Data Corporation grant "Computer Graphics and Computer Aided Geometric Design Using Beta-splines"

Principal Investigator for National Science Foundation Engineering Research Initiation grant "Algorithms to Integrate Antialiasing and Hidden Surface Calculations"

Principal Investigator for Microelectronics Innovation and Computer Research Opportunities (MICRO) research grant "Computer Graphics Techniques for Geometric Modeling"

PROFESSIONAL SOCIETIES:

Fellow of the American Academy of Optometry
Association for Research in Vision and Ophthalmology
Association for Computing Machinery/SIGGRAPH
National Computer Graphics Association
IEEE Computer Society
Canadian Man-Computer Communications Society
Society for Industrial and Applied Mathematics

OTHER PROFESSIONAL ACTIVITIES:

Keynote Speaker, Third International Conference on Image, Signal Processing and Pattern Recognition (ISPP 2024), Kunming, China, 8-10 March 2024
Keynote Speaker, Fourth International E-Conference on Advanced and Emerging Applications in Computing and Data Science (AEACDS), Institute of Professional Excellence & Management (IPEM), Ghaziabad, India, 15 Dec. 2023
Keynote Speaker, Second International Conference on Signal Processing, Computer Networks and Communications (SPCNC2023), Xiamen, China, 8-10 Dec. 2023
Keynote Speaker, Third International Conference on Signal Processing and Machine Learning (SPML 2023), Stanford, 25 Feb. 2023
Keynote Speaker, Euro-Asia Conference on Frontiers of Computer Science and Information Technology (FCSIT'22), Beijing, 17-21 Dec. 2022

Keynote Speaker, 12th Annual IEEE Computing and Communication Workshop and Conference (CCWC), 26-29 Jan. 2022
Keynote Speaker, International Conference on Computing and Data Science (CONF-CDS 2021), 28 Jan. 2021
Invited Speaker, Seventh International Conference on Signal Processing and Integrated Networks (SPIN), Noida, India, 28 Feb. 2020
Guest Speaker, International Conference on Emerging Trends in Information Technology and Engineering (ETITE'20), School of Information Technology and Engineering (SITE), Vellore Institute of Technology (VIT), 24 Feb. 2020
Invited Speaker, World Usability 2019, Jakarta, Indonesia, 13-15 Nov. 2019
Keynote Speaker, Third International Conference on Graphics and Signal Processing (ICGSP 2019), Hong Kong, 1-3 June 2019
Invited Speaker, Sixth International Conference on Signal Processing and Integrated Networks (SPIN), Noida, India, 7-8 March 2019
Invited Speaker, Amity International Conference on Artificial Intelligence (AICAI'2019), Dubai, 4-6 February 2019
Invited Speaker, Society for Imaging Science and Technology (IS&T) International Symposium on Electronic Imaging 2019, 15 Jan. 2019
Invited Speaker, Fifth International Conference on Signal Processing and Integrated Networks (SPIN-2018), Noida, India, 22-23 Feb. 2018
Invited Speaker, ETAI 2018, Society for Electronics, Telecommunications, Automation and Informatics. Struga, Macedonia, 20-22 September 2018
Keynote Speaker, Entertainment Technology (ET) Summit, Canada China International Film Festival, Montreal, 23-27 Sept. 2017
Keynote Speaker, Seventh International MCETECH Conference on e-Technologies, Ottawa, May 17-19, 2017
Invited Speaker, 4th International Conference on Signal Processing and Integrated Networks, SPIN-2017, Noida, India, 2-3 February 2017
Keynote Speaker, Eurographics Expressive 2016, Lisbon, 7-9 May 2016
Invited Speaker, The Future in Focus 2015, Las Vegas, 15 September 2015
Invited Speaker, Display Week 2015, Society of Information Display, San Jose, 31 May to 5 June 2015
Invited Speaker, International Conference on Computational Photography 2015, Houston, 24-26 April 2015
Invited Speaker, Conference on Computational Imaging and Vision (CIV), King Abdullah University of Science & Technology, Thuwal, Saudi Arabia, 1-4 March 2015
Invited Speaker, Visual Image Interpretation in Humans and Machines Workshop on Biological and Machine Vision, Stratford upon Avon, 24-25 September 2014
Invited Speaker, 22nd International Conference on Computer Graphics, Visualization and Computer Vision 2014, Pilsen, Czech Republic, 2-5 June 2014
Invited Speaker, High Visual Computing 2014, Krkonoše, Czech Republic, 2-5 February 2014
Invited Speaker, Young Scientists Symposium on Informatics, Beijing, 15 November 2013
Invited Speaker, ACIVS 2012 (Advanced Concepts for Intelligent Vision Systems), Brno, Czech Republic, 4-7 September 2012
Keynote Speaker, VISIGRAPP 2011 (Int'l Joint Conference on Computer Vision, Imaging and Computer Graphics Theory and Applications), Vilamoura, Portugal, 5-7 March 2011

Director, SIGGRAPH 2011, Vancouver, BC, Canada
Keynote Speaker, VISIGRAPP 2010 (Int'l Joint Conference on Computer Vision, Imaging and Computer Graphics Theory and Applications), Angers, France, 17-21 May 2010
Speaker, Minisymposium on Vision: Surgical and Synthetic, SIAM Conference on Mathematics for Industry: Challenges and Frontiers, San Francisco, 9-10 Oct. 2009
Keynote Speaker, 4th Conference on Digital Media and its Application in Museum and Heritage, Qingdao, China, 25-27 July 2009.
Keynote Speaker, CGW 2009, Taipei, Taiwan, 23 July 2009
Keynote Speaker, 12th WSEAS International Conference on Circuits, Systems, Communications, and Computers, Heraklion, Greece, July 23-25, 2008
Invited Speaker, Graphicon 2008, Moscow, Russia, June 2008
Program committee member, Pacific Graphics 2008, Tokyo, Japan, October 2008
Program committee member, 2008 International Conference on Computational Science and its Applications (ICCSA 2008) Perugia, Italy, June-July 2008.
Program committee member, Pacific Graphics 2007, Maui, Hawaii, October-November 2007
Invited Speaker, 2007 International Conference on Computational Science and its Applications (ICCSA'07) Kuala Lumpur, Malaysia, August 2007.
Invited speaker, 9th International Conference on Computer Graphics and Artificial Intelligence, Limoges, France, May 2006
Invited speaker, 18th AFIG (Journées de de l'Association Francaise d'Informatique Graphique) Strasbourg, France, November, 2005
Program committee member, Pacific Graphics 2005, Macao (SAR) China, October 2005
Speaker, Catalonian Studies Program, Barcelona and Girona, Spain, September 2003
Keynote speaker, 4th WSEAS International Conference on Applied Mathematics and Computer Science, (AMCOS 2005), Rio de Janeiro, Brazil, April 2005
Keynote speaker, Symposium on Visualization and Virtual Reality in Human Performance and Wellness, Calgary, Alberta, Canada, March 2005
Invited speaker, Workshop on Image Processing and Related Mathematical Problems, Hangzhou, Zhejiang, China, May 2004
Program committee member, Pacific Graphics 2003, Canmore, Alberta, Canada, October 2003
Program committee member, CAD/Graphics'2003, Macao (SAR) China, October 2003
Invited Speaker, 2003 International Conference on Computational Science and its Applications (ICCSA'03) Montreal, Québec, Canada May 2003.
Program committee member, 2003 International Conference on Computational Science and its Applications (ICCSA'03) Montreal, Québec, Canada, May 2003.
Program committee member, Pacific Graphics 2002, Beijing, China, October 2002
Sketches committee member, SIGGRAPH 2002, ACM, San Antonio, July 2002
Program committee member, Pacific Graphics 2001, Tokyo, Japan, October 2001
Papers committee member, SIGGRAPH 2001, ACM, Los Angeles, August 2001
Program committee member, CAD/Graphics'2001, Kummin, China, August 2001
Program committee member, IEEE Virtual Reality 2001 (IEEE VR2001), Yokohama, Japan, March 2001
Program committee member, Workshop Series on "Geometric Modeling: Fundamentals and Applications", IFIP Working Group 5.2, Seventh Workshop GEO-7, University of Parma, Italy, October 2-4, 2000
Program Co-chair, Pacific Graphics 2000, Hong Kong, 3-5 October 2000

Keynote speaker, International Conference on Information Visualisation IV'2000, London, England, July 2000
Program committee member, Geometric Modeling and Processing 2000, Hong Kong, April 2000
Program committee member, Virtual Reality 2000, New Brunswick, New Jersey, March 2000
Program committee member, Pacific Graphics '99, Seoul, October 1999
Program committee member, IASTED Int'l Conference on Computer Graphics and Imaging (CGIM'99), Palm Springs, CA, Oct. 1999
Keynote speaker, tutorial speaker, and session chair, International Conference on Information Visualisation IV'99, London, July 1999
Session Chair, Fourth International Conference on Curves and Surfaces, Association Franaise d'Approximation, Saint-Malo, France, July 1999
Invited Speaker and Session Chair, International Workshop on the Application Techniques of Virtual Reality, Hangzhou, China, June 1999
Session Chair, International Conference on Advanced Manufacturing Technology, Xi'an, China, June 1999
Invited Speaker, Shape Modeling International '99, Aizu-Wakamatsu, Japan, March 1999
Invited Speaker, Surface Approximation and Visualisation, Christchurch, New Zealand, February 1999
Invited Speaker, IEEE Engineering in Medicine and Biology Society, workshop, Hong Kong, October 1998
Invited Speaker, Chinagraph, Guilin, October 1998
Int'l Advisory Committee, Computer Aided Geometric Design: New Trends and Applications, Anogia, Crete, Greece, June 1997
Invited exhibitor, ACM 97, San Jose, March 1997
Speaker, Mopane 1996: Refraction and Keratometry: The Mathematics and Statistics, Mopani, South Africa, 3-5 Aug. 1996
Lecturer, Eighth International School for Computer Science Researchers, Lipari Island, Italy, July 1996
Speaker, Virtual Reality and Movement Analysis, Marseille, June 1996
Speaker, Europe-U.S.-France International Symposium III, , May 1996
Program committee member, IDMME, Nantes, April 1996
Program committee member, Fourth International Conference in Central Europe on Computer Graphics and Visualization '96 (WSCG '96), February 12-16 1996, University of West Bohemia, Plzen, Czech Republic
Speaker, Spline Functions and Theory of Wavelets Conference, Montreal, January 1996
Speaker, Images de Synthèse Conference, Saint-Etienne, December 1995
Speaker, Academy of Optometry meeting, New Orleans, December 1995
Speaker, IEEE Engineering in Medicine and Biology '95 Conference, Montreal, September 1995
Program committee member, Winter School of Computer Graphics '95, Plzen, Czech Republic, February 1995
Speaker and Session chair, Third International Conference on Mathematical Methods in Computer Aided Geometric Design, Ulvik, Norway, June 1994
Invited speaker, International Symposium on New Aspects of Numerical Analysis, Stresa, Italy, September 1993
Technical program committee member, SIGGRAPH '93, ACM, Anaheim, August 1993
Session chair, IFIP Conference on Modeling in Computer Graphics, Genoa, June/July 1993

Session chair, CG International '93, Lausanne, Switzerland, June 1993
Session chair, Computer Animation '93, Geneva, Switzerland, June 1993
Session chair, Curves and Surfaces, Chamonix-Mont-Blanc, June 1993
Speaker, Catalonian Studies Program, Barcelona, January 1993
Plenary session invited speaker and tutorial speaker, Eurographics '92, Cambridge, England, September 1992
Instructor, Technology Transfer Corporation, Tel Aviv, Israel, May 1992
Instructor, University of the Witswatersrand, Johannesburg, October 1991
Program committee member, CAD/Graphics '91, Hangzhou, China, September 1991
Invited speaker, 4th SIBGRAPI Congress, Sao Paulo, July 1991
Program committee member, Graphics Interface '91, Calgary, June 1991
Instructor, University of Oxford, Continuing Education, 1991, 1992
Invited speaker, Workshop on Geometric Modeling, Rio de Janeiro, January 1991
Course chair, SIGGRAPH'90, ACM, Dallas, 7 August 1990
Mini-symposium chair, Curves and Surfaces, Chamonix-Mont-Blanc, 21-27 June 1990
Keynote speaker and program committee member, Graphics Interface '90, Halifax, May 1990
Organizing committee member and session chair, Curves and Surfaces in Computer Vision and Graphics, Santa Clara, February 1990
Organizer, The Berkeley Series in Computer Graphics & Geometric Modeling, 1989
Mini-symposium speaker, SIAM Conference on Geometric Design, Tempe, November 1989
Course speaker, PIXIM'89, Paris, September 1989
Invited speaker, American Mathematical Society meeting, Boulder, Colorado, August 1989
Course speaker, SIGGRAPH '89, ACM, Boston, August 1989
Invited participant and session chair, NATO A.S.I. Computation of Curves and Surfaces, Puerto de la Cruz, July 1989
Tutorial speaker, Latinoamerican Conference on Informatics, Santiago, Chile, July 1989
Tutorial chair, speaker, and session chair, Graphics Interface '89, London, Ontario, June 1989
Program committee member, Graphics Interface '89, London, Ontario, June 1989
Invited Speaker, Hewlett-Packard Computer Graphics Symposium, Fort Collins, June 1989
Session chair, Computer Graphics '89, Smolenice, Czechoslovakia, May 1989
Speaker, NSF - Industry - University Symposium, IBM Thomas J. Watson Research Center, April 1989
Organizer, NSF Workshop on Mechanics, Control, and Animation of Articulated Figures, MIT, April 1989
Keynote speaker, Citicorp Transaction Technology Inc. Computer Graphics Seminar, Santa Monica, March 1989
Instructor, Digital Equipment Corporation, Maynard, MA, January 1989
Distinguished Lecturer, IBM Thomas J. Watson Research Center, Yorktown Heights, NY, December 1988
Course speaker, Triad Fall Technical Conference, November 1988
Course speaker, PIXIM'88, Paris, October 1988
Course speaker, SIGGRAPH '88, ACM, Atlanta, August 1988
Invited Speaker, Hewlett-Packard Computer Graphics Symposium, Fort Collins, June 1988
Speaker, Conference on Mathematical Methods of Computer Aided Design, Oslo, June 1988
Instructor, Digital Equipment Corporation, Nashua, N.H., December 1987
Instructor, Berlin Continuing Education Program course, Berlin, September 1987

Instructor, University of California at Berkeley, University Extension, 1987, 1988, 1989, 1990
Speaker, SIAM Conference on Applied Geometry, Albany, July 1987
Speaker, Research Conference on Geometric Design, Wayne State University, Detroit, May 1987
Invited Speaker, Advanced Computer Graphics, Hewlett-Packard, April 1987
Program Committee member, CESTA Cognitiva 87 -- Electronic Image
Course speaker, SIGGRAPH '86, ACM, Dallas, August 1986
Senior Reviewer, SIGGRAPH '86, ACM, Dallas, August 1986
Invited speaker, International Summer Institute, Stirling, Scotland, June 1986
Invited participant, Wolfenbuettel, West Germany, June 1986
Invited Speaker, 3èmes Rencontres Nouvelles Image, Pau, France, May 1986
Invited speaker, ACM SIGGRAPH France, Paris, France, May 1986
Course speaker and session chair, International Electronic Image Week, Nice, France, April 1986
Invited speaker, Colloque "Synthèse d'Image", Brest, France, April 1986
Invited speaker, XI International Symposium on Computer Systems, Monterrey, Mexico, April 1986
Member, Board of Advisors, CAD/CAM Abstracts, October 1985 - present
Keynote speaker, Pan Pacific Computer Conference, Melbourne, Sept. 1985
Technical Program Chair, SIGGRAPH '85, ACM, San Francisco, 22-26 July 1985
Course speaker, SIGGRAPH '85, ACM, San Francisco, July 1985
Tutorial speaker, panel member, and session chair, Graphics Interface '85, Montreal, May 1985
Speaker, Automotive Computer Graphics '84, Dearborn, Dec. 1984
Course speaker, SIGGRAPH '84, ACM, Minneapolis, July 1984
Senior Reviewer, SIGGRAPH '84, ACM, Minneapolis, July 1984
Tutorial speaker, Graphics Interface '84, Ottawa, May - June 1984
Panel member, Graphics Interface '84, Ottawa, May - June 1984
Invited speaker, Visual Dynamics: Showcase '83, Los Angeles SIGGRAPH, Nov. 1983
Tutorial speaker, SIGGRAPH '83, ACM, Detroit, July 1983
Tutorial speaker, Graphics Interface '83, Edmonton, May 1983
Invited lecturer, Computer Graphics and Automation Symposium, Tunghai University, April 1983
Tutorial speaker, InterGraphics '83, Tokyo, April 1983
Minicourse instructor, CADCON West'83, Anaheim; East'83, Boston; West'84, San Francisco; West'85, Anaheim
Instructor, Institute in Computer Science, UC Santa Cruz, 1982, 1983
Session chair, CompCon '82, IEEE Computer Society, San Francisco, February 1982

COURSES TAUGHT:

CS 24 / VS 24 / E 24: Boeing 737 MAX: Money, Machines, and Morals in Conflict
CS 24: Berkeley through the Lens
CS 39A: Introduction to Computer Animation
CS 39G: Virtual Reality
CS 39J: The Art and Science of Photography: Drawing with Light
CS 39P: Photographing History in the Making

CS 39Q: Priorities Under Pressure: A Critical Assessment of How the University's Core Mission is Affected by Intercollegiate Athletics
CS 39S: Photographic Technique in the Free Speech Movement and Today
CS 39T: Berkeley through the Lens
CS 184: Foundations of Computer Graphics
CS 194-5: Advanced Digital Animation
CS 194-7 and CNM 190-7: The Art of Animation
CS 284: Computer Aided Geometric Design and Modeling
CS 294-5: Graphics and Virtual Reality
CS 294-7 and CNM 290-3: The Art of Animation
CS 301, CS375: Teaching Techniques for Computer Science
CS 194-8, CNM 190-2, and CNM 190-3: Advanced Digital Animation
CS 194-23: The Art and Science of Digital Photography

COLLEGE AND DEPARTMENTAL COMMITTEES:

ABET committee
On the Same Page 2012 Advisory Board
Engineering Ethics & Social Responsibility
Art, Technology, and Culture Committee
Committee on Student Conduct
College of Engineering Undergraduate Study
EECS Undergraduate Study Committee
Berkeley Center for New Media Research Committee
Student Grievance Committee (Co-chair)
Fifth Year Master's Program (Co-chair)
Letters and Science Computer Science major
Undergraduate Study
Letters and Science Computer Science major
Student Awards & Competitions (Co-chair)
Soda Safety
Undergraduate Advising
Undergraduate Admissions
College of Engineering Bio-Manufacturing Building
College of Engineering Bioengineering
EECS Graduate Study/Prelims (Co-chair)
EECS Preliminary Exams (Co-chair)
CS Competitions
Industrial Liaison
Faculty Recruiting
Computer Needs and Resources
Building Program
Retreat (Chair)
Major in Letters and Science (Co-chair)
Reentry Program

Undergraduate Admissions
Undergraduate Advising
Preliminary Examinations (Chair)
Co-op Work-Study and Employment
Publicity (Chair)
Safety
Graduate Admissions
Committee on Computing and Computer Science Education
Student-Faculty Relations
Instructional Laboratories
Graduate Student Advisory

STUDENTS SUPERVISED:

Zi-Yuan Huang, I-Lun Tsai, Yinjun Zheng, Yisang Luo, and Yue Hu, *Low Light Eye Tracking for Vision Correcting Display*, M.Eng., Capstone Report, May 2023.

Joey Hou, Lu Li, and Tianjian Xu, *Vision Correcting Display on Virtual Reality Headsets*, M.Eng., Capstone Report, May 2023.

Zhaoyang He and Blair Xiao, *Vision-Correcting Display for Videos Based on Compressive Deconvolution*, M.Eng., Capstone Report, May 2023.

Lei Chen, Yifei Lyu, Yuqing Rachel Liao, and Shu-Ping Chen, *Magic Hand Sign Language PC Control*, M.Eng., Capstone Report, May 2023.

Irina Hallinan, Isadora Smith, and Jinmeng Ashley Zhang, *American Sign Language Translator for Inclusive Virtual Meetings*, M.Eng., Capstone Report, May 2023.

Gavin Chan, Linzhe Bill Tong, and Jinghua Zhang, *Webcam Keyboard Input for Improved Computer User Accessibility*, M.Eng., Capstone Report, May 2023.

Jackson Wagner, Zhiqi Yan, Xu Zhao, Brian Hong, *Controlling a PC with Face and Speech Recognition for Quadriplegic Users*, M.Eng., Capstone Report, May 2023.

Kexin Guo, Weiyu Feng, Hanqi Zhang, and Tucker Cullen, *A Voice Assistant for the Voiceless: Computer-Vision Based Sign Language Recognition*, M.Eng., Capstone Report, May 2022.

Fang Hu, Xinying Hu, Yang Huang, Guanghan Pan, and Juntao Peng, *SimpleGest: Assistive Hand-Gesture Recognition Technology Based on Computer Vision*, M.Eng., Capstone Report, May 2022.

Ke (Kenny) Huang, Siqi Jiang, Zhibo Fan, and Zhengmin (Skye) Zhang, *Accessible Vision-Based Mouse-Free Cursor Control with Extended Gestures*, M.Eng., Capstone Report, May 2022.

Quy Hoang Nguyen, Yiqing Tao, Jordan Wong, Kanglan Tang, and Yaowei (Morgan) Ma, *Eyeudio: An Affordable Hands-Free Alternative to the Computer Mouse and Keyboard*, M.Eng., Capstone Report, May 2022.

Maxime Defauw, Yao Huang, Hau-En (Howard) Ke, Kuan-Yu Lung, Sagar Patel, and Yucheng Wang, *Lightweight Neural Networks for Hand Gesture Classification*, M.Eng., Capstone Report, May 2022.

Jinghan Wang, Simon N. Heimowitz, and Yao Cheng Yee, *Vision Correcting Display: Non-Linear Operator*, M.Eng., Capstone Report, May 2022.

Chin-An (Daniel) Chen, Vincent Lieng, Ya-Sin Luo , Zi-Chao (Alex) Lin, *Improving Image Signal Processing for Eye Tracking on Visual Correcting Display*, M.Eng., Capstone Report, May 2022.

Shuwei (Waller) Li, Haohua Lyu, Kaiwen (Kaia) Yu, Siyu Zhang, *Real-time Vision Correcting Displays Implemented with Parallel Computing*, M.Eng., Capstone Report, May 2022.

Anmol Parande, *Compressive Deconvolution Algorithms for a Computational Lightfield Display for Correcting Visual Aberrations*, Master's Research Project Report, May 2022.

Shiyun (Jimmy) Xu, *Towards a Real-Time Vision Correcting Display*, Master's Research Project Report, May 2022.

Patricia Ouyang, *Accessible Two-handed Gesture Control for Human Computer Interaction*, Master's Research Project Report, May 2022.

Rohan Hajela, *Creating a Video Classification Neural Network Architecture to Map American Sign Language Gestures to Computer Cursor Controls*, Master's Research Project Report, May 2022.

Lisa Qing, Xianlin (Shay) Shao, Xuewei Wang, and Sharon Su Yen Lee, *Adapting Vision Correcting Displays to Real-World Settings*, M.Eng., Capstone Report, May 2021.

Shiqi (Sophie) Wu, Sihao Chen, Weili Liu, Yiyang (Frank) Cai, Yizhou (Daniel) Wang, and Xuantong Liu, *Assistive Technology for Navigation, Selection, Pointing, and Clicking in a Mouse-free Environment*, M.Eng., Capstone Report, May 2021.

Michael Qi, *Designing an Assistive Mouse for Human Computer Interaction Using Hand Gestures*, Master's Research Project Report, May 2021.

Jacob Holesinger, *Adapting Vision Correcting Displays to 3D*, Master's Research Project Report, September 2020.

Tarkan Al-Kazily, Melody Mao, Eric Liu, Chun-Ning Tsao, Wei-Chun Hwang, and Eric Ying,

Algorithms for Displays that Correct Nearsighted and Farsighted Vision, M.Eng., Capstone Report, May 2020.

Toby Baker, Weihao Dong, Xun (Sean) Lin, Ayusman Saha, and Fangping Shi, *Camera-Based Cursor Control to Increase User Accessibility*, M.Eng., Capstone Report, May 2020.

Yizhen Ding, Sundi Xiao, Xiaoyu (Evelyn) Yang, Yaying Zhao, and Zhuoming Zhang, *Extending Vision Correcting Display Algorithm to Allow for Flexible Viewer Position,* M.Eng., Capstone Report, May 2020.

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